

CLAIMS

1. A thermosetting liquid coating composition for an aluminum wheel comprising:

- 5 (A) a hydroxy- and carboxy-containing acrylic resin having a hydroxyl value of 90 to 150 mg KOH/g and an acid value of 1 to 30 mg KOH/g, the acrylic resin being obtained by copolymerizing a monomer mixture comprising 10 to 50 wt.% of a C₆₋₁₈ alkyl ester of (meth)acrylic acid, 8 to 40 wt.% of a
10 secondary hydroxy-containing unsaturated monomer, and a carboxy-containing unsaturated monomer; and
(B) an amino resin.

2. The coating composition according to claim 1
15 wherein the proportion of amino resin (B) is 5 to 70 parts by weight per 100 parts by weight of acrylic resin (A) on a solids basis.

3. The coating composition according to claim 1
20 wherein the secondary hydroxy-containing unsaturated monomer is at least one member selected from the group consisting of 2-hydroxypropyl acrylate, 2-hydroxypropyl methacrylate, and unsaturated monomers obtained by esterifying a carboxy-containing unsaturated monomer with an epoxy-containing compound.

- 25 4. The coating composition according to claim 1 which further comprises an epoxy resin (C).

5. The coating composition according to claim 1 which
30 is a primer coating composition for an aluminum wheel.

6. The coating composition according to claim 1 which is a top clear coating composition for an aluminum wheel.

- 35 7. A method of coating an aluminum wheel comprising:

- (1) applying the primer coating composition of claim 5 to an aluminum wheel, optionally followed by baking; and
- (2) applying a colored thermosetting coating composition to the primer coat obtained in step (1), followed by baking.

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8. A method of coating an aluminum wheel comprising:

- (1) applying the primer coating composition of claim 5 to an aluminum wheel, optionally followed by baking;
- (2) applying a colored or lustrous thermosetting coating composition to the primer coat obtained in step (1), optionally followed by baking; and
- (3) applying a clear coating composition to the colored or lustrous coat obtained in step (2), followed by baking.

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9. A method of coating an aluminum wheel comprising:

- (1) applying a liquid primer coating composition to an aluminum wheel, optionally followed by baking;
- (2) applying a colored or lustrous thermosetting coating composition to the primer coat obtained in step (1), optionally followed by baking; and
- (3) applying the top clear coating composition of claim 6 to the colored or lustrous coat obtained in step (2), followed by baking.

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10. A method of coating an aluminum wheel comprising:

- (1) applying the primer coating composition of claim 5 to an aluminum wheel, optionally followed by baking;
- (2) applying a colored or lustrous thermosetting coating composition to the primer coat obtained in step (1), optionally followed by baking; and
- (3) applying the top clear coating composition of claim 6 to the colored or lustrous coat obtained in step (2), followed by baking.

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11. A method of coating an aluminum wheel comprising:

- (1) applying a powder primer coating composition to an aluminum wheel, followed by baking;

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(2) applying the primer coating composition of claim 5 to the powder primer coat obtained in step (1), optionally followed by baking;

(3) applying a colored or lustrous thermosetting coating composition to the primer coat obtained in step (2), optionally followed by baking; and

(4) applying a clear coating composition to the colored or lustrous coat obtained in step (3), followed by baking.

10 12. A method of coating an aluminum wheel comprising:

(1) applying a powder primer coating composition to an aluminum wheel, followed by baking;

(2) applying a liquid primer coating composition to the powder primer coat obtained in step (1), optionally followed by baking;

15 (3) applying a colored or lustrous thermosetting coating composition to the primer coat obtained in step (2), optionally followed by baking; and

(4) applying the top clear coating composition of claim 6 to the colored or lustrous coat obtained in step (3), followed by baking.

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13. A method of coating an aluminum wheel comprising:

(1) applying a powder primer coating composition to an aluminum wheel, followed by baking;

25 (2) applying the primer coating composition of claim 5 to the powder primer coat obtained in step (1), optionally followed by baking;

(3) applying a colored or lustrous thermosetting coating composition to the primer coat obtained in step (2), optionally followed by baking; and

30 (4) applying the top clear coating composition of claim 6 to the colored or lustrous coat obtained in step (3), followed by baking.